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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---------------------------|----------------------|---------------------------|------------------|
| 10/582,732 | 06/13/2006 | Christian Sandner | SANDNER ET AL -3 PCT 5017 | |
| 25889 WILLIAM CO | 7590 06/08/2007 DLLARD | EXAMINER | | |
| COLLARD & ROE, P.C. | | | TOLAN, EDWARD THOMAS | |
| 1077 NORTHERN BOULEVARD ROSLYN, NY 11576 | | | ART UNIT | PAPER NUMBER |
| | | | 3725 | |
| | | | MAH DATE | DEL WEDV MODE |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 06/08/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | |
|---|---|--|--|--|
| | 10/582,732 | SANDNER ET AL. | | |
| Office Action Summary | Examiner | Art Unit | | |
| | Edward Tolan | 3725 | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was pailure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | I. nely filed the mailing date of this communication. D (35 U.S.C. § 133) | | |
| Status | | | | |
| 1) Responsive to communication(s) filed on | | | | |
| | action is non-final. | · . | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 3 O.G. 213. | | |
| Disposition of Claims | | · | | |
| 4) ☑ Claim(s) 1-5 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) 1-5 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | • | | | |
| Application Papers | | | | |
| 9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 13 June 2006 is/are: a) Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Examiner | ☑ accepted or b)☐ objected to liderawing(s) be held in abeyance. See on is required if the drawing(s) is obj | e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d). | | |
| Priority under 35 U.S.C. § 119 | • | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of | s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)). | on No d in this National Stage | | |
| Attorium auto) | | | | |
| Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | te | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the counter-toothing" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "both face sides over the circumference" in line 9.

There is insufficient antecedent basis for this limitation in the claim. No face side or circumference has been set forth.

Claim 2, lines 2 and 3, the terms "is axially clamped for radial clamping" is not clear. It is not clear as to whether the clamps are acting radially or axially.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandner (6,357,272) in view of Miyamoto et al. (5,824,168). Sandner discloses a

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method and apparatus for forming a gearwheel from a powder metal blank (1) supported on a mandrel (2) with a circular pressing tool (3) having counter-toothing (8) engaging toothing (9) of the blank. Sandner does not disclose that the blank is axially clamped between two pressure rings. Miyamoto (fig. 16) teaches two pressure rings (17,19) actuated in an axial direction along a mandrel (14,16) to clamp respective top and bottom faces of a gear blank. The pressure rings are coaxial to the mandrel. Pressure ring (19) is connected with an axial actuator (15). Miyamoto teaches that the pressure rings utilize a locking method wherein the blank position is held rigid and does not fluctuate. It would have been obvious to one skilled in the art at the time of invention to provide Sandner with axially actuated blank clamping as taught by Miyamoto in order to hold the blank tightly during rolling.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sandner in view of Miyamoto and further in view of Sakabe (JP 62-57726). Sandner in view of Miyamoto does not disclose that the pressing rings provide locking using axially projecting noses. Sakabe teaches axial projections (5a,5b,8a,8b) for clamping a gear blank (1). It would have been obvious to one skilled in the art at the time of invention to provide the clamping rings of Sandner in view of Sakabe with axial projections as taught by Sakabe for a strong clamping action.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to Ed Tolan whose telephone number is 571-272-4525. FAX communications should be sent to 571-273-8300.

PRIMARY EXAMINER